



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,563	02/18/2004	Venkatesh Veeraraghavan	50037.238US01	3537
27488 7590 06/23/2008 MERCHANT & GOULD (MICROSOFT) P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903				
EXAMINER GUPTA, MUKTESH G				
ART UNIT 2144		PAPER NUMBER		
MAIL DATE 06/23/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/782,563

Applicant(s)

VEERARAGHAVAN ET AL.

Examiner

Muktesh G. Gupta

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 01 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. **Claims 1-10 and 16** are amended.
2. **Claims 1-23** have been examined on merits and are pending in this application.

Response to Amendment

3. Acknowledgment is made for Applicants Amendments for claims filed on 04/02/2008.
4. Applicant's amendment necessitated a new ground(s) of rejection presented in this office action. Applicant's arguments are deemed moot in view of the following new grounds of rejection as explained here below, necessitated by Applicant's substantial amendment (i.e., the rules are combined through conditional logic operators) to the claims which significantly affected the scope thereof.

Applicant's arguments with respect to **Claims 1, 10 and 16** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2144

5. **Claims 1-23**, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Application Publication No. 2002/0049749 to Helgeson et al. (hereinafter "Helgeson").

As to **Claims 1, 10 and 16**, Helgeson teaches method, system and computer program for targeting content to an audience that includes audience members, comprising (as stated in par. 0919, lines 1-3, par. 0925, lines 1-5, Information Distributor Developer's Kit (IDK), provides the infrastructure and core functionality to find and deliver relevant targeted information, and provides a flexible mechanism (method) for annotating and matching web resources (**targeting content**). It locates and delivers **web pages (content)** to Business **Objects (audience)**. Further, as stated in par. 0439, lines 2-7, Member is any entity that can be assigned privileges in the system. Members can be individual users of the system (employees or customers); they can also be associated with generic roles, such as a system administrator, or even an automated process, such as an Interconnect ChangeManager):

creating rules to define the audience to receive the content (as stated in par. 0292, line 1, par. 0293, lines 1-3, par. 0301, lines 1-6, Business Development Kit (BDK) provides a set of core services to perform useful operations, for collecting metadata object profiles, consolidating, analyzing, organizing into UserObject profiles for business objects (audience) based on Business Rules (rules), which is a set of pre-defined business **rules** that affect the workflow (content) and behavior of various business **objects** in the system);

wherein the rules are combined through conditional logic operators (as stated in par. 0301, lines 1-4, par. 0306, lines 1-7, Saba's learning application provides a set of pre-defined business rules that affect the workflow and behavior of various business objects in the system. SabaObject defining set of operations common to all business objects, including the ability to get and set properties using a variety of data types and the ability to save and restore an object's state. Specific business object classes can subclass SabaObject to add functionality and business logic appropriate to that class);

wherein the rules include: a property query rule that determines if an attribute matches audience members in preexisting lists (as stated in par. 0224, lines 1-6, par. 0077-0081, par. 0345, lines 8-10, The persistence framework defines a common code path used to create new objects, restore and update existing objects, delete objects, and find objects, verify object data and SQL commands to save and restore information using a relational database. Information Distributor Server 521 is applicants' query and delivery mechanism. Based on XML and RDF metadata standards, it defines a high-level query language and a set of agents for implementing information services, for querying metadata, for generating metadata, for locating metadata-based matches, and for delivering match results. Metadata about the business objects and their attributes is captured in the system);

a member of rule that determines if audience members are a member of a particular preexisting list (as stated in par. 0294, lines 1-7, par. 0346, lines 1-7, par. 0502, lines 1-7, BDK Security services provides extremely fine-grained security control

Art Unit: 2144

to control whether specific users have privileges to perform operations such as creating or viewing a particular class of business object. Some of the metadata that is currently captured about a class or an attribute could be dynamically determined using the Java reflection API. Examples include the parent ID and attribute count for business objects and attribute type for an attribute. The Java reflection API provides classes Class and Field that can be used to retrieve such information. The Platform's BDK Security System also utilizes an hasPrivilege() method. The addPrivilege() method executes a SQL query to return all privilege bitmaps for each security list the user belongs to that match the target object and domain parameters);

and a reports under rule that determines if audience members are located hierarchically under an audience member within a preexisting list; wherein the preexisting lists include a group distribution list; a security group; and an organizational structure (as stated in par. 0294, lines 1-7, par. 0346, lines 1-7, par. 0958, lines 1-7, Domains are the Platform's 501 partitioning mechanism for business objects. Domains allow users to define a hierarchical structure that models their organization or business. All business objects are assigned a specific domain and belong to that domain. In turn, security privileges are assigned on specific domains. The domain hierarchy is automatically enforced during security checks. This means that users who have access to a domain can access objects in that domain, and that users who have access to ancestors of a given domain also have access to objects in that domain assigning security; that is, defining the sets of allowed operations that groups of users can perform. Security operations can be specified according to either the

general class of business object or to specific, individual business objects Security operations can be assigned based on either universal or domain-specific user groupings. Delivery Agents are responsible for delivering the results of a match to the correct recipients in the appropriate fashion or format. Delivery Agents integrate with various delivery mechanisms, delivering either pointers to the match results or the actual information itself. Typical delivery vehicles include e-mail servers, web servers, and enterprise portals servers);

compiling the audience; wherein compiling the audience includes applying each of the rules to define the audience to determine members that meet the criteria of each rule and applying the conditional logical operators to the rules to create the audience (as stated in par. 0915-0917, lines 1-4, par. 0840-841, lines 1-4, par. 0433, lines 1-7, par. 0447, lines 1-7, Information server employs metadata-based profiles to match information with users. User profiles as generated provide consolidating users, analyzing, and delivering information that is personalized, relevant, and needed to users. UserObject encapsulates specific user information holding userobject ID (1) ID: An opaque object identifier, and (2) aClass: the type or class of the object. Security System, provides an extremely powerful model for assigning security, that is, defining the sets of allowed operations (rules) that groups of users based on the class to which they belong can perform (compile the audience));

tagging the audience to the content (as stated in par. 0528, lines 1-4, The engine 808, in conjunction with a set of tools, utilities, APIs, and predefined widgets and

views, acts as a platform and provides the user with a set of tools, tag and widget libraries, Java classes, and XSL style sheets);

obtaining the content from a data store; and providing the content to the audience (as stated in par. 0511-0517, lines 1-4, The **Web Content Server** 800 can allow the present invention to interface with many other industry standard software programs to make the exchange and flow of data easy and accurate, enables interconnection with external systems, and present web content while improving the dynamic acquisition of data from a variety of sources followed by its reformatting and display via style sheets).

As to Claims 2, 11 and 17, Helgeson teaches method, system and computer program of Claims 1, 10 and 16, wherein creating the rules to define the audience further comprises:

specifying an attribute (as stated in par. 0231, 0232, lines 1-10, the meta-data store contain the definition (rules) of each type of object in the system, its attributes (attribute based rule type), and some basic properties of those attributes);

a member type (as stated in par. 0233, 0234, 0235, 0236, 0250, 0251, 0252, 0253 and 0442, Metadata store consists of tables, which define (rule) the class and subclass (a member type) of every business object in the system, and is registered in these tables and also describes basic properties of objects in columns. **Every object** is expected to know which class it belongs to (member of class), and how that class is registered in the meta-data store);

and an organization (as stated in par. 0447 , lines 1-7 and par. 448 , lines 1-7, Domains are the Platform's partitioning mechanism for business objects. Domains define (rule) a hierarchical structure that models their organization or business, based on geography or division. All business objects are assigned a specific domain and belong to that domain).

As to Claim 3, Helgeson teaches method of Claim 2, wherein the content is provided within a web part (as stated in par. 0030-0032 , FIG. 8A illustrates a more detailed configuration of an exemplary Web Content Server. FIG. 8B shows a process flow diagram illustrating how to produce dynamic web content. FIG. 8C shows a process flow diagram illustrating the page development process).

As to Claims 4 and 19, Helgeson teaches method, and computer program of Claims 2 and 17, wherein gathering information from the more than one source to compile the audience including the organizational structure information, further comprise accessing a directory in a file structure to obtain the organizational structure (as stated in par. 0233-0236, 0250-0264, 0448, 0487-0489, 0983, Metadata store consists of tables, which define (rule) the class and subclass (a member type) of every business object in the system, and is registered in these tables and also describes basic properties of objects in columns. Every object is expected to know which class it belongs to, and how that class is registered in the meta-data store (directory). Metadata is structured information about information, and is used to

identify, categorize, and locate resources of interest. Resource Description Format (RDF) is a new, XML-based standard for associating arbitrary metadata with any web resource. It can be used to describe resources ranging from a course catalog on the WWW to a business object. Each subclass of object stores a class identifier so that it can tell the system which entry in the meta-data store it corresponds to. All business **objects** are assigned a specific **domain (organizational structure)** and belong to that domain. In turn, security privileges are assigned on specific domains. Security information is stored **database** tables. Security API focuses on the database structures and SQL used to store and query security information. The combination of a match template and a target RDF file can produce an RDF Query. The core of the Information Distributor is a RDF Query engine that performs a query on one or more RDF databases, then returns a set of resources that satisfy the query).

*As to Claims 5, 12 and 20, Helgeson teaches method, system and computer program of Claims 2, 11 and 17, wherein obtaining the content from a data store comprises accessing the content from one or more data servers, wherein creating the at least one rule to define the audience, further comprises using a set of operators to link more than one rule (as stated in par. 0346, lines 1-11, par. 0803-0804, lines 1-9, some of the metadata that is captured about a **class** or an **attribute (rule)** could be dynamically determined using the Java reflection API. Examples include the parent ID and attribute count for business **objects (audience)** and **attribute type** for an **attribute**. The Java reflection API provides **classes Class** and **Field** that can be used to retrieve*

such information. Furthermore, instead of building a hash table-based infrastructure for storing and retrieving attribute values, one can use **methods** like **set** and **get (operators)** in the **Field class** to **operate** directly on the attributes, which are declared as **member variables of the class**). The automated system uses a business systems platform comprised of several unique servers to efficiently manage multiple applications which are generally distributed across a network, and to control the execution of the required tasks with minimum use of redundant data input to the several applications. Interconnect Server is a platform for information exchange based on XML and supports many types of information exchange across heterogeneous systems, which could include Enterprise Resource Planning (ERP) systems, e-mail servers, and other web servers. The Interconnect Server allows interconnection between such external systems and the Interface Server, Business Server, and Information Server).

*As to Claims 6, 13 and 21, Helgeson teaches method, system and computer program of Claims 5, 12 and 20, further comprising compiling each of the rules before applying the conditional logical operators to link the rules (as stated in par. 0366, lines 1-17, par. 0529, lines 1-5, BDK provides a **Relationship class (rule)** , that has **attributes (rule)** for the **name** of relationship, the **type** of relationship (**operators**), the **source** class and attribute, and the **destination** class and attribute. The Relationship class will encapsulate lifetime management constraints implicit in each of the different types of relationships. Thus, if an object is being removed and it is declared to have*

compositional relationship (operators) with some other objects, the Relationship class will ensure the removal of the related objects (**compiling each of the rules before applying the operators to link the rules**). Similarly, when creating an object, the Relationship class will ensure that referential integrity constraints are being satisfied. The platform 808 allows content, logic and style to be separated out into different XML files, and uses XSL transformation capabilities to merge them resulting in the automatic creation of HTML through the processing of statically or dynamically generated XML files).

*As to Claims 7, 14 and 22, Helgeson teaches method, system and computer program of Claims 6, 11 and 17, further comprising scheduling the compilation of the rules on a predetermined time schedule basis (as stated in par. 0944-954, IDK defines (rules) interfaces for **metadata** generation (Importers or Import Agents) and matching (Revolvers or Match Agents) and for delivering query results (Dispatchers or Delivery Agents). Combinations of these three services allow the **Information Distributor** to interoperate with a variety of enterprise systems and to service queries in a broad range of application **domains**. Common tasks supported by Import Agents include: Executing batch imports, **Scheduling imports at regular intervals**, Analyzing and translating **metadata** formats, specifying a **target database**, **integrating** with **Interconnect (scheduling the compilation of the rules on a predetermined basis)**. Match Agents determine what matches and queries occur under what conditions. Match Agents can be triggered by a request to a web or application server, by specific events,*

or on a **regularly scheduled basis**. A Match Agent also specifies the RQL and any input metadata to use as the metadata query).

*As to Claims 8, 15 and 23, Helgeson teaches method, system and computer program of Claims 5 and 14, further comprising providing access to the content tagged to the one of the audience members through a web interface that is created individually for that audience member. (as stated in par. 0020, lines 1-21, a **computer program** stored on a **computer readable medium** is disclosed having **computer code mechanisms (methods)** for loading a **business application (content targeting application)** management **system** platform, accessible via client computers to a **plurality of users (audience)**; for executing a WDK **Web interface** server as a part of the business application management system platform, for receiving a **user selected command** and for processing a **web document** that is a **custom presentation of information**).*

*As to Claims 9, Helgeson teaches method of Claim 5, further comprising storing the rules to define the audience as an XML representation (as stated in par. 0324, lines 1-4, BDK provide **XML-based interfaces** for saving and retrieving business **objects**, these interfaces provide the communication layer with the other Platform servers and components).*

*As to Claim 18, Helgeson teaches computer program of Claim 17, wherein gathering information from the more than one source to compile the audience, further comprises gathering information from pre-existing lists of members (as stated in par. 0450, lines 1-4, par. 0451, lines 1-5 and par. 453 , lines 1-5, **Security Lists (pre-existing lists of members)** part of Security System are the **mechanism (method)** by which **members** are matched with **privileges (compile the audience)**. A Security List **defines (rules)** a set of domain-specific **privileges (gathering information)** and a **set of list members**).*

Response to Arguments

6. Applicant's arguments, with regards to **Claims 1, 10 and 16** filed 03/17/2008 have been fully considered but they are not persuasive.

The Examiner respectfully disagrees with Applicant's arguments, on page 7-9, as updated search resulted in new grounds of rejections.

Regarding, "Helgeson is directed at managing different applications". Helgeson is also directed to a single application. For example, Saba's learning application provides a set of pre-defined business rules that affect the workflow and behavior of various business objects in the system. The BDK provides a mechanism to enable and disable these business rules, as stated in par. 0301, lines 1-5.

Regarding Helgeson doe not teach building preexisting lists that include group distribution list; a security group; and an organizational structure. Helgeson does disclose the same. The persistence framework defines a common code path used to

Art Unit: 2144

create new objects, restore and update existing objects, delete objects, and find objects, verify object data and SQL commands to save and restore information using a relational database. Information Distributor Server is applicants' query and delivery mechanism. Based on XML and RDF metadata standards, it defines a high-level query language and a set of agents for implementing information services, for querying metadata, for generating metadata, for locating metadata-based matches, and for delivering match results. Metadata about the business objects and their attributes is captured in the system, as stated in par. 0224, lines 1-6, par. 0077-0081, par. 0345, and lines 8-10.

Domains are the Platform's 501 partitioning mechanism for business objects. Domains allow users to define a hierarchical structure that models their organization or business. All business objects are assigned a specific domain and belong to that domain. In turn, security privileges are assigned on specific domains. The domain hierarchy is automatically enforced during security checks. This means that users who have access to a domain can access objects in that domain, and that users who have access to ancestors of a given domain also have access to objects in that domain assigning security; that is, defining the sets of allowed operations that groups of users can perform. Security operations can be specified according to either the general class of business object or to specific, individual business objects Security operations can be assigned based on either universal or domain-specific user groupings. Delivery Agents are responsible for delivering the results of a match to the correct recipients in the appropriate fashion or format. Delivery Agents integrate

Art Unit: 2144

with various delivery mechanisms, delivering either pointers to the match results or the actual information itself. Typical delivery vehicles include e-mail servers (distribution list source), web servers, and enterprise portals servers, as stated in par. 0294, lines 1-7, par. 0346, lines 1-7, par. 0958, and lines 1-7.

Therefore, in view of the above reasons, Examiner maintains rejections.

Action Final

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Muktesh G. Gupta whose telephone number is 571-270-5011. The examiner can normally be reached on Monday-Friday, 8:00 a.m. -5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2144

/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2144